

PRODUCT INFORMATION PACKET

Model No: 449TTGS16554

Catalog No: E596

Hazardous Duty® Explosion Proof Motor, 300 & 250 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM,
449T Frame, EPFC



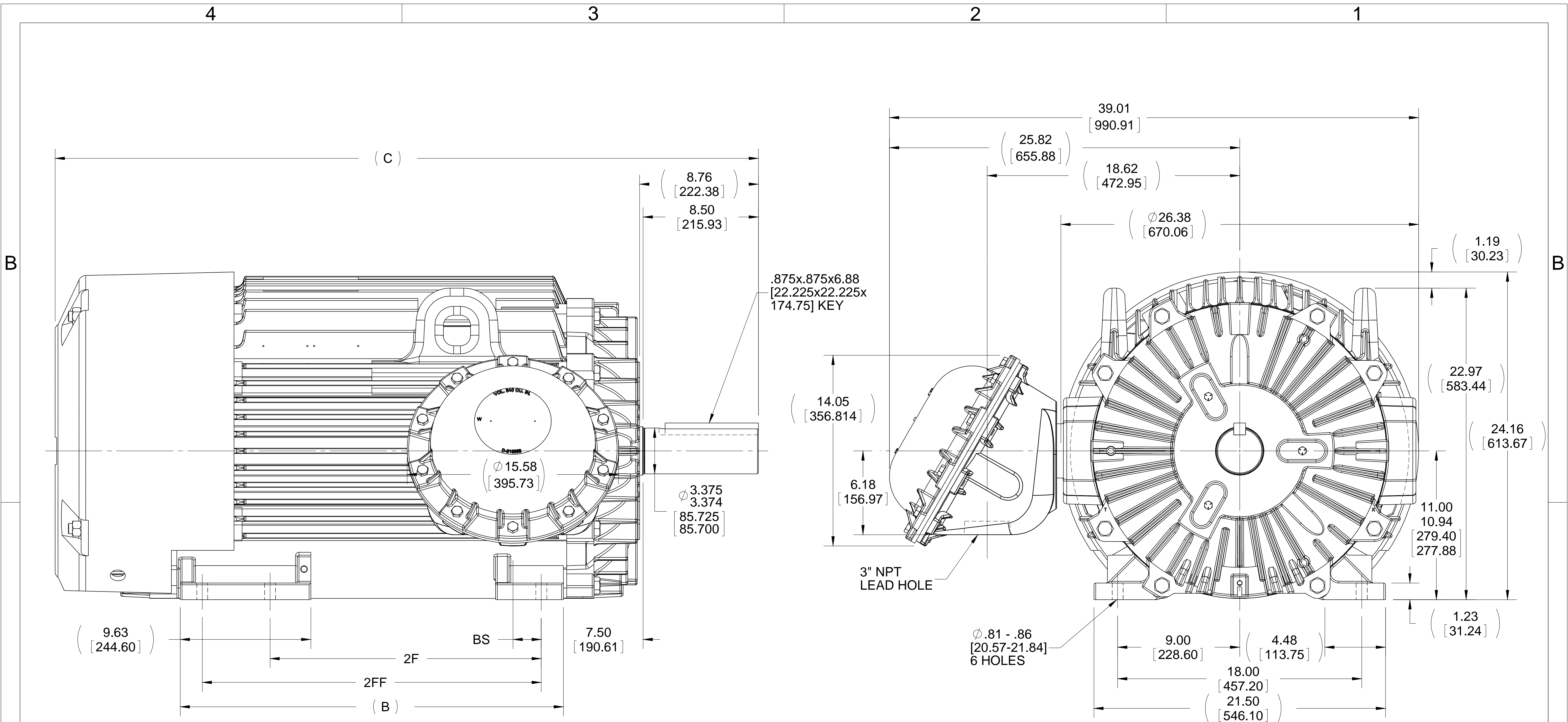
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Nameplate Specifications

Phase	3	Output HP	300 & 250 Hp
Output KW	224.0 & 187.0 kW	Voltage	460 & 380 V
Speed	1785 & 1485 rpm	Service Factor	1.0 & 1.0
Frame	449T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	96.5 & 96.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	339 & 340 A	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	NU319	Opp Drive End Bearing Size	6318
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0085 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Roller
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	51.85 in
Frame Length	28.75 in	Shaft Diameter	3.375 in
Shaft Extension	8.76 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 2:1		
Connection Drawing	A-EE7300CB	Outline Drawing	B-SS515578-2875



NOTES:
 1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
2875	447T	28.25 [717.55]	51.85 [1316.99]	20.00 [508.00]	-----	2.09 [53.09]
2875	449T	28.25 [717.55]	51.85 [1316.99]	-----	25.00 [635.00]	2.09 [53.09]

DRAWING REVISION C	REVISION BY AJW	DATE 03-31-2015
ECO ECO-0074730	APPROVED BY TDB	DATE 04-01-2015
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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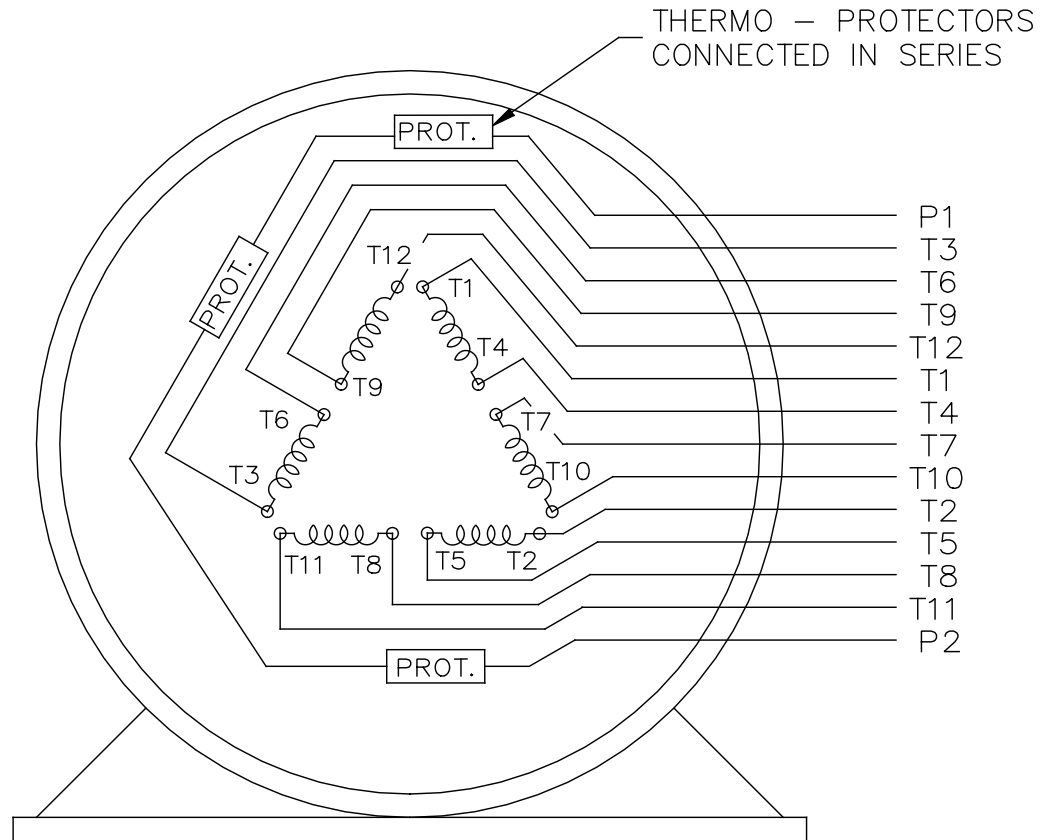
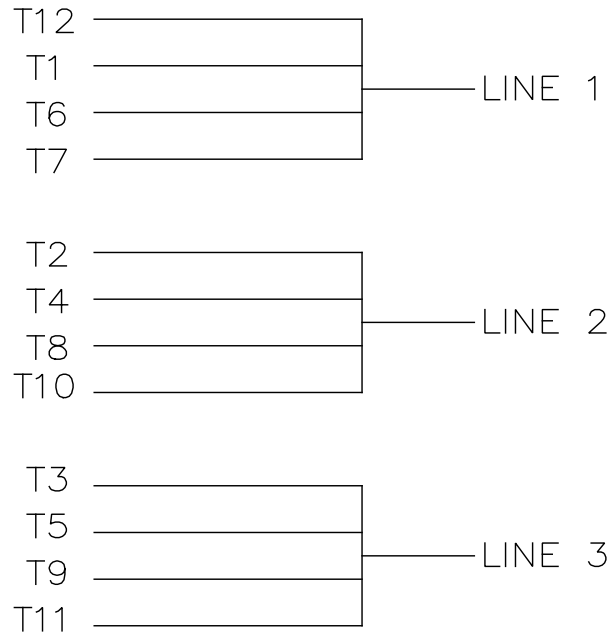
TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°
 CORNER FILLETS: R.02 [51]
 MACHINED SURFACES: 200 INCH/mm 5.1
 mm SHOWN IN [BRACKETS]

DRAWN BY SMC
DATE 04-15-1996
APPROVED BY JPN
DATE 04-19-1996
REFERENCE
THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 447/449T FR. -EXP. PR. - STD.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS515578
	SHEET 1 OF 1



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL-BELOIT CORPORATION	DRAWN KL 02-27-2003			
				DEC.	INCHES		CHK GFH 03-03-2003			
				.X	± -	TITLE CONNECTION DIAGRAM - EXTERNAL 12 LEAD SINGLE VOLTAGE	APPD JES 03-03-2003			
				.XX	± -		SCALE 1=1			
				.XXX	± -		REF			
A	CHANGED TO REGAL TITLEBLOCK	ECO-0108299	WGJ 08-18-2016	EMH	.XXXX	MAT'L.	FMF			
NO.	REVISION	BY & DATE	CHK	ANG	± -	FINISH	PREV			
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE EE7300CB		SIZE A	DRAWING NO. EE7300CB	PAGE OF	REV.
				DIST						

CERTIFICATION DATA SHEET

Model#: 449TTGS16554 AA **WINDING#:** T449445 NONE 1
CONN. DIAGRAM: A-EE7300CB **ASSEMBLY:** F1 ONLY
OUTLINE: B-SS515578-2875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
300&250	224&187	1800	1785&1485	447/449T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	339&340	PWS & YDRUN OR INV	CONTINUOU S	F1	1.0/1.0	40	3300

FULL LOAD EFF: 96.5&96.2	3/4 LOAD EFF: 96.5	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86&86	3/4 LOAD PF: 84.5	1/2 LOAD PF: 78	96.2	SQ CAGE INV RATED	98

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
883 LB-FT	2200	1775 LB-FT 201	2100 LB-FT 238	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	93 LB-FT^2	2500 LB-FT^2	25 SEC.	1	3000 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
ROLLER	BALL	SHC-	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
NU319	6318	100/POLYREX					

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

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INVERTER TORQUE: CONSTANT 2:1 INV. HP SPEED RANGE: NONE
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/21/2017 07:27:38 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 1/28/2019
 Customer: _____
 Attention: _____
 Submitted by: DINESH SUDDULA



449TTGS16554

Submittal

Data @ 460 V

Motor Load Data

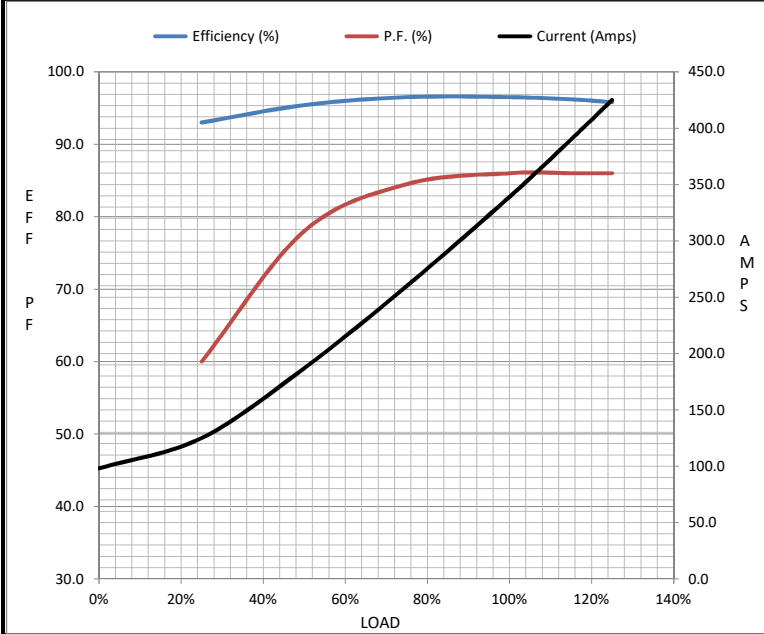
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	98.0	125	187	260	339	390	425	2,200
Torque (ft-lb)	0.00	219	439	660	883	1,015	1,105	1,775
RPM	1800	1796	1792	1788	1785	1,782	1778	0
Efficiency (%)		93.0	95.4	96.5	96.5	96.2	95.8	
P.F. (%)	4.5	60.0	78.0	84.5	86.0	86.0	86.0	31.0

Motor Speed Data

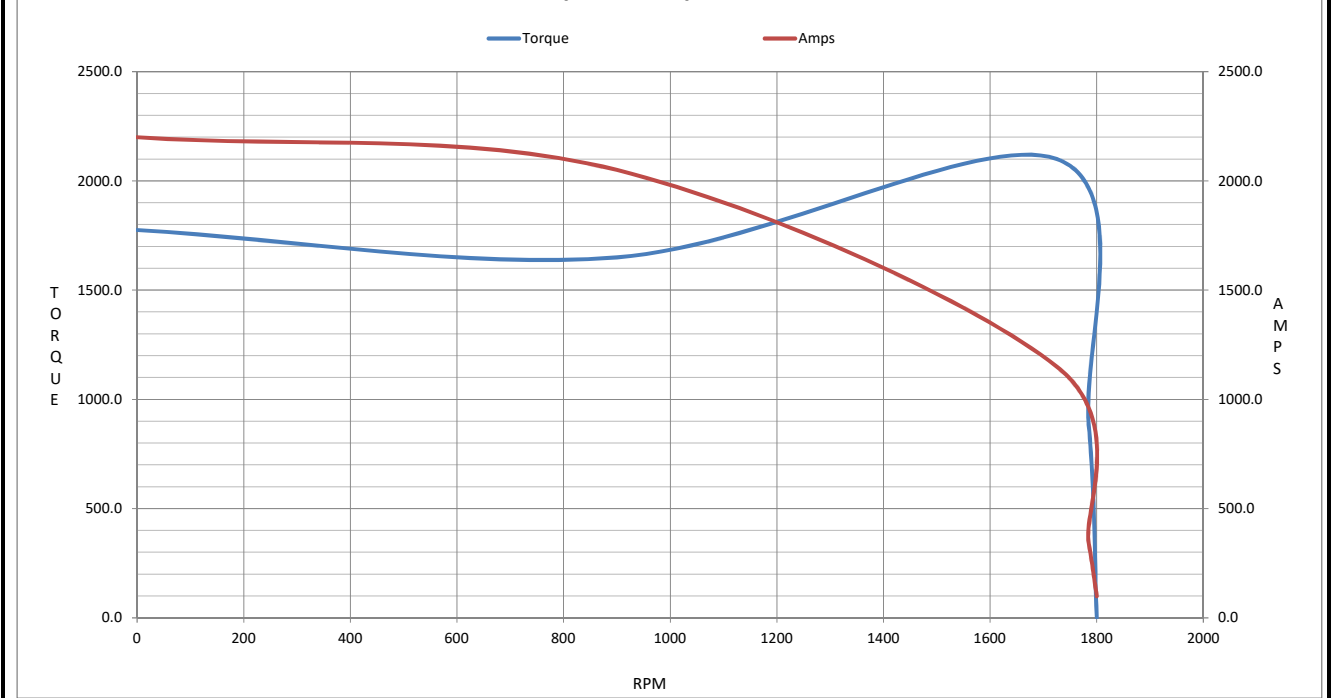
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	2,200	2,050	1,150	339	98.0
Torque (ft-lb)	1,775	1,650	2,100	883	0.00

Information Block

HP	300.0			
Sync. RPM	1800			
Frame	449			
Enclosure	EPFC			
Construction	TGS			
Voltage	460#380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	93.0 Lb-Ft ²			
Ref Wdg	T449445 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS515578-2875			
Conn. Diag	A-EE7300CB			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0050	0.0060	0.0760	0.1140	2.6200



Speed - Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number 20220524- E12044
Report Reference E12044-19970314
Issue Date 2022-MAY-24

Issued to: REGAL BELOIT AMERICA INC
1946 W COOK RD
FORT WAYNE IN 46818

Tradename: Marathon

**This certificate confirms that
representative samples of**

MOTORS FOR USE IN HAZARDOUS LOCATIONS
Electric motors for use in hazardous locations; Class I,
Groups C and D; Class II, Groups F and G; Inclusive of
Model Number 449TTGS16554 (may have prefix and/or
suffix characters).

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 674 - Electric Motors and Generators for Use in Division
1 Hazardous (Classified) Locations,
CSA C22.2 No. 145, Electric Motors and Generators for
Use in Hazardous (Classified) Locations

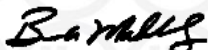
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This is to certify that representative samples of the product as specified on this certificate were tested
according to the current UL requirements.



Bruce Mahrenholz, Director North American Certification Program

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